NWS FORM E-5 (11-88) (PRES. BY WSOM E-41)	**U.S. DEPARTMENT OF COMMERCE** NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) **WFO Jackson, Mississippi**
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR: MONTH **June** YEAR **2003**
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE **Alan Gerard, MIC** **In Charge of HSA** DATE **July 16th , 2003**

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)

Synopsis...

The month of June was characterized by weak frontal systems, mid month upper level disturbances, and a late month tropical storm.

Weather during the first 8 days of the month was affected by a series of weak frontal systems pushing into the HSA. Rainfall amounts were scattered over the area with most stations receiving rain at least 3 of the 8 days. Daily rainfall amounts were generally 2 inches or less. Some heavier amounts occurred at Larto Lake, LA (2.40 inches on the 2nd), Clayton, LA (2.60 inches on the 4th), Raleigh, MS (2.83 inches on the 3rd), and Winona, MS (2.52 inches on the 7th).

From the 12th to the 19th, the HSA was affected by a series of upper level disturbances disseminating from a very slow moving closed upper air low pressure area to the northwest of the HSA. Most areas received rainfall, some locally heavy, at least 6 out of 7 days over this time period. The rainfall was very beneficial to southern portions of Mississippi and northeast Louisiana where rainfall amounts had been running below normal for the year. Daily rainfall amounts were generally 3.00 inches or less. The most widespread heavy rainfall occurred over northeast LA, southeast AR, and north and central MS on the 12th and 13th, as a large area of thunderstorms pushed southeast out of Arkanasas. Some heavier rainfall amounts were reported at the following locations: Northeast Research Station near St. Joseph, LA (5.22 inches on the 13th), Red River Lock#1, LA (4.93 inches on the 13th), Port Gibson, MS (4.20 inches on the 13th), Eudora, Ar (3.73 inches on the 12th), Oakley Experiment Station (Hinds County), MS (3.60 inches on the 13th), Grenada 5 NNE, MS (3.53 inches on the 12th), Shubuta, MS (3.42 inches late on the 19th) and Hamburg, AR (3.32 inches on the 13th).

As the upper level low pushed east of our HSA, a weak cold front pushed south and became stationary over southern Mississippi. This frontal system continued to kick off afternoon showers and thunderstorms over southern Mississippi from the 20th into the 22nd. Rainfall amounts were generally 1.75 inches or less.

From late on the 26th into the 27th another weak cold front pushed into the area, stalled, and eventually washed out along the coast on the 28th.

Rainfall amounts were generally 1.50 inches or less over the HSA. Some heavier amounts occurred on the 27th over east and southeast sections of MS: Walnut Grove, MS (3.05 inches), Moscow 5SW (2.40 inches) and Forest (2.25 inches).

By far the most significant event occurred over the southeast and east portions of the HSA from late on the 29th until July 1st, Tropical Storm Bill moved into southeast LA and tracked across southern MS. Heavy rainfall amounts occurred near and to the east of the storm's center. Rainfall totals ranged from 1 to 7.50 inches over the HSA during the event. Some 48 hour Rainfall totals from T.S. Bill are: Hattiesburg EMA, MS (7.66 inches), Hattiesburg Municipal Airport, MS (7.66 inches), Desoto National Forest 18 SE of Laurel, MS (6.22 inches), Purvis, MS (5.95 inches) and Brooklyn, MS (5.42 inches).

River and Soil Conditions...

Soil moisture conditions began the month below normal over portions of southern MS and portions of northeast Louisiana, while the remainder of the HSA was near normal. Above normal rainfall during June left soil moisture conditions for the month above normal with the exception of southwest MS, northeast MS, and southeast AR, where conditions were near normal.

Moderate flooding was reported over the upper Big Black River while minor flooding was reported on portions of the middle Big Black. Heavy rain near the end of the month caused minor flooding on Tuscolameta Creek. After cresting in May, minor flooding continued over portions of the Mississippi River in the Jackson HSA until early June. See the June E-3 report for specific information on flood crests.

After many days of rainfall during the middle of the month, many rivers over central and southern Mississippi were running higher than normal. Tropical Storm Bill produced many sharp rises on the lower Leaf, Black Creek, Tallahala Creek, and the Chickasawhay. Only the Chickaswhay at Enterprise and Black Creek at Brooklyn would go above flood stage in the first few days of July.

With normal to above normal soil moisture conditions and near normal rainfall forecast for the 60 to 90 day period, flood potential for HSA rivers should remain near normal to slightly above normal for the next 60 to 90 days.

Rainfall for the month of June...

RIVER BASIN	RAINFALL	DEPARTURE FROM NORMS
Southeast Arkansas (Chicot & Ashley counties)	4.25 to 7.50 inches	Normal to much above normal.

Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	*4.00 to 8.00 inches northern sections* *5.00 to 8.00 inches central sections* *4.75 to 9.75 inches southern section*	*Normal to much above normal.* *Normal to much above normal.* *Above normal to much above normal.*
Lower Yazoo	*4.00 to 8.00 inches*	*Normal to much above normal.*
Big Black	*8.00 to 9.75 inches upper basin* *6.00 to 7.00 inches middle basin* *4.00 to 6.00 inches lower basin*	*Much above normal.* *Much above normal.* *Normal to above normal.*
Homochitto/ Bayou Pierre	*6.25 to 9.50 inches*	*Much above normal.*
Pearl(abv Jackson)	*5.00 to 12.00 inches*	*Above to much above normal.*
Pearl(Blo Jackson)	*4.00 to 9.25 inches*	*Normal to much above normal.*
Pascagoula	*6.00 to 11.00 inches over the Leaf basin.* *9.00 to 10.00 inches over the Black Creek basin.* *8.50 to 15.00 inches over the Chickasawhay*	*Much above normal.* *Much above normal.* *Much above normal.*
Tombigbee tributaries in the JAN HSA	*6.00 to 11.00 inches*	*Much above normal.*

The heaviest rainfall amounts in the HSA for the month were: 14.80 inches at Shubuta, MS; 12.34 inches at Collinsville, MS; 12.07 inches at Walnut Grove, MS; 11.43 inches at Laurel, MS; 11.32 inches at Raleigh, MS; 10.90 inches at Golson 8W, MS; 10.81 inches at Moscow 5SW; 10.25 inches at Columbus, MS.

Here at the Jackson WFO, the June monthly rainfall was 6.46 inches, which was 2.64 inches above normal. We had received 37.40 inches of rainfall through the end of June which was 6.83 inches above normal.

At the Meridian Key Field, the June monthly rainfall was 10.95 inches, which was 6.96 inches above normal. Meridian had received 37.23 inches

through the end of June which was 4.55 inches above normal.

Mississippi River...

The Mississippi river crested in late May. The river began the month of June well above seasonal norms and remained above seasonal norms through the entire month. River stages receded until mid month and then began to rise to a secondary peak near the end of the month. This peak was well below early month stages.

The provisional high and low stages for June are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	36.40	06/01	19.28	06/11
Greenville, MS	M	06/01	30.82	06/11
Vicksburg, MS	42.55	06/01	28.16	06/13
Natchez,MS	49.00	06/01	36.85	06/14

Products issued...

Total Flood Warning products issued: 8
Total Flood Statement products issued:39
Daily Rainfall Products (RRA'S) issued 30
Daily River Forecast Products (RVS'S) issued: 30
Daily River Stage products (RVA'S) issued 30

Marty V. Pope
Service Hydrologist

Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USCE Mobile District
USCE Vicksburg District
USCE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division

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Pearl River Valley Water Supply District
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Southern Region Climate Center
Pat Harrison Waterway District